



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0913; Project Identifier MCAI-2020-00971-T;

Amendment 39-21480; AD 2021-07-03]

RIN 2120-AA64

Airworthiness Directives; MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.) Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2015-05-03, which applied to certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. AD 2015-05-03 required revising the existing maintenance or inspection program, as applicable, to incorporate new or revised maintenance requirements and airworthiness limitations, and incorporating structural repairs and modifications to preclude widespread fatigue damage (WFD). This AD continues to require the actions specified in AD 2015-05-03. This AD also requires revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations, and incorporating additional structural repairs and modifications to preclude WFD. This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary, as well as the corresponding structural repairs and modifications to preclude WFD. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF

PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of April 21, 2015 (80 FR 13758, March 17, 2015).

ADDRESSES: For service information identified in this final rule, contact MHI RJ Aviation ULC, 12655 Henri-Fabre Blvd., Mirabel, Québec J7N 1E1 Canada; Widebody Customer Response Center North America toll-free phone: +1-844-272-2720 or direct-dial phone: +1-514-855-8500; fax: +1-514-855-8501; email: thd.crj@mhij.com; Internet: <https://mhij.com>. You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0913.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0913; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Andrea Jimenez, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart

Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7330; fax: 516-794-5531;

email: 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued TCCA AD CF-2014-07R1, dated July 13, 2020 (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for certain MHI RJ Aviation ULC Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. You may examine the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0913.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2015-05-03, Amendment 39-18113 (80 FR 13758, March 17, 2015) (AD 2015-05-03). AD 2015-05-03 applied to certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. The NPRM published in the *Federal Register* on October 14, 2020 (85 FR 64987). The NPRM was prompted by a determination that new or more restrictive airworthiness limitations are necessary, as well as the corresponding structural repairs and modifications to preclude WFD. The NPRM proposed to continue to require the actions specified in AD 2015-05-03. The NPRM also proposed to require revising the existing maintenance or inspection program, as applicable, to incorporate additional new or more restrictive airworthiness limitations, and incorporating structural repairs and modifications to preclude WFD. The FAA is issuing this AD to address WFD, which could adversely affect the structural integrity of the airplane. See the MCAI for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comment received on the NPRM and the FAA's response to each comment.

Request to Include Credit for Actions Accomplished using Additional Repair Engineering Orders (REOs)

MHI RJ Aviation ULC (MHI) requested that the FAA revise the NPRM to include credit for initial inspections accomplished using certain Bombardier REOs that were not specified in paragraph (l) of the proposed AD. MHI specified that, since issuance of the MCAI, it has continued to support U.S. operators with REOs. MHI provided the additional REOs and specified the applicable manufacturer serial number for each specific REO.

The FAA agrees for the reasons provided. Additionally, the FAA finds that including the additional REOs would allow operators of the affected airplanes to receive credit for the initial inspections required by the service information specified in paragraph (j) of this AD if those actions were performed before the effective date of this AD using those REOs without requesting an alternative method of compliance. The FAA has revised figure 1 to paragraph (l) of this AD accordingly.

Conclusion

The FAA reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule with the change described previously and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR Part 51

MHI RJ Aviation has issued Bombardier Temporary Revision 2B-2280, dated June 12, 2020. This service information, among other actions, describes airworthiness limitation (AWL) Task 53-41-207, which specifies airworthiness limitations and inspections for fuselage and longitudinal skin splices at stringers (STR) 6 and 20.

This AD also requires the following service information, which the Director of the Federal Register approved for incorporation by reference as of April 21, 2015 (80 FR 13758, March 17, 2015).

- AWL Task 53-41-110, Longitudinal Str. 6 splice butt strap at Str. 6, FS409.0 to FS617.0, of Appendix B, Airworthiness Limitations, of Part 2, Airworthiness Requirements, Revision 9, dated June 10, 2013, of the Bombardier CL-600-2B19 Maintenance Requirements Manual, CSP A-053.

- AWL Task 53-41-204, Frame splice angles at STR 6 and 20, of Appendix B, Airworthiness Limitations, of Part 2, Airworthiness Requirements, Revision 9, dated June 10, 2013, of the Bombardier CL-600-2B19 Maintenance Requirements Manual, CSP A-053.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 431 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

The FAA estimates the total cost per operator for the retained actions from AD 2015-05-03 to be \$7,650 (90 work-hours x \$85 per work-hour).

The FAA has determined that revising the maintenance or inspection program takes an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. In the past, the agency has estimated that this action takes 1 work-hour per airplane. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, the agency estimates the average total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

The FAA has received no definitive data that would enable us to provide cost estimates for the repairs and modifications specified in this AD.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by:

- a. Removing Airworthiness Directive (AD) 2015-05-03, Amendment 39-18113 (80 FR 13758, March 17, 2015), and
- b. Adding the following new AD:

2021-07-03 MHI RJ Aviation ULC (Type Certificate Previously Held by

Bombardier, Inc.): Amendment 39-21480; Docket No. FAA-2020-0913; Project

Identifier MCAI-2020-00971-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2015-05-03, Amendment 39-18113 (80 FR 13758, March 17, 2015) (AD 2015-05-03).

(c) Applicability

This AD applies to MHI RJ Aviation ULC Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 through 7990 inclusive, and 8000 and subsequent.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Reason

This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary, as well as the corresponding structural repairs and modifications to preclude widespread fatigue damage (WFD). The FAA is issuing this AD to address WFD, which could adversely affect the structural integrity of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Revision of Maintenance or Inspection Program, with Certain Requirements Removed and Updated Language

This paragraph restates the requirements of paragraph (g) of AD 2015-05-03, with certain requirements removed and updated language. Within 60 days after April 21, 2015 (the effective date of AD 2015-05-03): Revise the existing maintenance or inspection program, as applicable, by incorporating the airworthiness limitations (AWL) tasks specified in paragraphs (g)(1) and (2) of this AD. The initial compliance times for the

tasks start from the applicable threshold times specified in Part 2 Airworthiness Requirements, Revision 9, dated June 10, 2013, of Appendix B, Airworthiness Limitations, of Bombardier CL-600-2B19, Maintenance Requirements Manual, CSP A-053; except that, for airplanes that have accumulated more than 38,000 total flight cycles as of April 21, 2015, the initial compliance time for the AWL tasks is before the accumulation of 2,000 flight cycles after April 21, 2015.

(1) AWL Task 53-41-110, Longitudinal Str. 6 splice butt strap at Str. 6, FS409.0 to FS617.0, of Appendix B, Airworthiness Limitations, of Part 2, Airworthiness Requirements, Revision 9, dated June 10, 2013, of the Bombardier CL-600-2B19 Maintenance Requirements Manual, CSP A-053.

(2) AWL Task 53-41-204, Frame splice angles at STR 6 and 20, of Appendix B, Airworthiness Limitations, of Part 2, Airworthiness Requirements, Revision 9, dated June 10, 2013, of the Bombardier CL-600-2B19 Maintenance Requirements Manual, CSP A-053.

(h) Retained No Alternative Actions or Intervals, with No Changes

This paragraph restates the requirements of paragraph (h) of AD 2015-05-03, with no changes. After the maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (n)(1) of this AD.

(i) Retained Repairs and Modifications, with Changed Paragraph References

This paragraph restates the requirements of paragraph (i) of AD 2015-05-03, with changed paragraph references. Before the accumulation of 60,000 total flight cycles: Install repairs and modifications to preclude WFD at locations specified in the tasks identified in paragraphs (g)(1) and (2) of this AD, using a method approved by the Manager, New York ACO, FAA; or Transport Canada Civil Aviation (TCCA); or MHI

RJ Aviation ULC's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) New Maintenance or Inspection Program Revision

Within 60 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in AWL Task 53-41-207, as specified in Bombardier Temporary Revision 2B-2280, dated June 12, 2020. The initial compliance time for doing the tasks is at the time specified in AWL task 53-41-207, as specified in Bombardier Temporary Revision 2B-2280, dated June 12, 2020, or within 60 days after the effective date of this AD, whichever occurs later.

(k) New No Alternative Actions or Intervals

After the existing maintenance or inspection program has been revised as required by paragraph (j) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an AMOC in accordance with the procedures specified in paragraph (n)(1) of this AD.

(l) Credit for Previous Actions

This paragraph provides credit for the initial inspections required by the service information specified in paragraph (j) of this AD, if those actions were performed before the effective date of this AD using the Bombardier repair engineering orders (REOs) specified in Figure 1 to paragraph (l) of this AD.

Figure 1 to paragraph (I) – REOs Equivalent to Initial Inspection

Airplane Serial Number -	Bombardier REO -
7168	601R-53-00-714, Revision --, dated January 30, 2019
7437	601R-53-00-722, Revision --, dated March 28, 2019
7574	601R-53-00-725, Revision --, dated June 4, 2019
7667	601R-53-00-726, Revision --, dated June 4, 2019
7640	601R-53-00-727, Revision --, dated June 25, 2019
7636	601R-53-00-728, Revision --, dated June 15, 2019
7400	601R-53-00-730, Revision --, dated June 20, 2019
7660	601R-53-00-731, Revision --, dated June 20, 2019
7638	601R-53-00-732, Revision --, dated June 24, 2019
7523	601R-53-00-734, Revision --, dated June 25, 2019
7425	601R-53-00-735, Revision --, dated June 25, 2019
7568	601R-53-00-737, Revision --, dated July 15, 2019
7873	601R-53-00-739, Revision --, dated July 15, 2019
7536	601R-53-00-741, Revision – A, dated July 23, 2019
7657	601R-53-00-742, Revision --, dated July 23, 2019
7682	601R-53-00-752, Revision --, dated August 22, 2019
7656	601R-53-00-753, Revision --, dated August 22, 2019
7904	601R-53-00-754, Revision --, dated August 26, 2019
7687	601R-53-00-758, Revision --, dated September 9, 2019
7879	601R-53-00-762, Revision --, dated November 4, 2019
7447	601R-53-00-763, Revision --, dated October 30, 2019
7256	601R-53-00-765, Revision --, dated October 21, 2019
7663	601R-53-00-767, Revision --, dated November 1, 2019

Airplane Serial Number -	Bombardier REO -
7457	601R-53-00-769, Revision --, dated October 29, 2019
7257	601R-53-00-772, Revision --, dated November 20, 2019
7569	601R-53-00-777, Revision --, dated December 11, 2019
7695	601R-53-00-780, Revision --, dated January 6, 2020
7880	601R-53-00-785, Revision --, dated February 1, 2020
7490	601R-53-00-787, Revision --, dated February 27, 2020
7366	601R-53-00-790, Revision --, dated February 26, 2020
7306	601R-53-00-795, Revision --, dated April 16, 2020
7479	601R-53-00-797, Revision --, dated June 17, 2020
7487	601R-53-00-798, Revision --, dated June 17, 2020
7786	601R-53-00-800, Revision --, dated July 29, 2020
7566	601R-53-00-801, Revision --, dated August 10, 2020
7889	601R-53-00-804, Revision --, dated September 12, 2020
7742	601R-53-00-813, Revision --, dated November 5, 2020
7892	601R-53-00-814, Revision --, dated November 5, 2020

(m) New Repairs and Modifications

Before the accumulation of 60,000 total flight cycles: Install repairs and modifications to preclude WFD at locations specified in the tasks identified in paragraph (j) of this AD, using a method approved by the Manager, New York ACO, FAA; or TCCA; or MHI RJ Aviation ULC 's TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

(n) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7300; fax: 516-794-5531.

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(ii) AMOCs approved previously for AD 2015-05-03, are approved as AMOCs for the corresponding provisions of paragraph (g) of this AD.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or TCCA; or MHI RJ Aviation ULC's TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

(o) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) TCCA AD CF-2014-07R1, dated July 13, 2020, for related information. This MCAI may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0913.

(2) For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7330; fax: 516-794-5531;

email: 9-avs-nyaco-cos@faa.gov.

(p) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Bombardier Temporary Revision 2B-2280, dated June 12, 2020.

(ii) [Reserved]

(4) The following service information was approved for IBR on April 21, 2015 (80 FR 13758, March 17, 2015).

(i) Appendix B, Airworthiness Limitations, of Part 2, Airworthiness Requirements, Revision 9, dated June 10, 2013, of the Bombardier CL-600-2B19 Maintenance Requirements Manual, CSP A-053:

(A) AWL Task 53-41-110, Longitudinal Str. 6 splice butt strap at Str. 6, FS409.0 to FS617.0; and

(B) AWL Task 53-41-204, Frame splice angles at STR 6 and 20.

(ii) [Reserved]

(5) For service information identified in this AD, contact MHI RJ Aviation ULC, 12655 Henri-Fabre Blvd., Mirabel, Québec J7N 1E1 Canada; Widebody Customer Response Center North America toll-free phone: +1-844-272-2720 or direct-dial phone: +1-514-855-8500; fax: +1-514-855-8501; email: thd.crj@mhirj.com; Internet: <https://mhirj.com>.

(6) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 18, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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